

CARBON NANOTUBE FABRICSABSTRACT OF THE DISCLOSURE

5 The present invention provides fabrics that have unique
chemical, electrical, and thermal properties. The fabrics
comprise layers of yarns woven together wherein the yarns
further comprise carbon nanotube fibers. These carbon nanotube
fibers may be either single-walled or multi-walled carbon
nanotubes. The use of carbon nanotube fibers allows the fabrics
10 to insulate, semi-conduct or super-conduct electrical charges.
Additionally, the thermal properties of carbon nanotubes allow
thermal energy to flow efficiently between the fabric and a heat
sink or source. Additional yarns of materials other than carbon
nanotubes can be integrated or woven into the fabric to provide
15 other unique properties for the fabric. These fabrics can be
layered to form unique garments or structures.